

Styrolux 656C

Styrene Butadiene Copolymer (SBC)

TECHNICAL
DATASHEET

DESCRIPTION

The product line Styrolux® comprises clear styrene butadiene copolymers. The grades have in general an intrinsic toughness, are easy to process and work as modifiers and compatibilizers not only in polystyrene but in many other polymers, e.g. polyolefins. For all Styrolux® grades food contact statements are available upon request. Styrolux® 656C shows enhanced flow properties and is used almost exclusively used for injection molding of rigid, tough parts, requiring highest levels of clarity and surface gloss. 656C is also offered for medical applications and is Gamma, X-ray & ETO sterilizable.

FEATURES

- Easy processing
- Sterilisable(ETO,NO2,Irradiation)
- Transparency

APPLICATIONS

- Food contact application
- Medical devices
- Rigid packaging
- Cosmetic packaging
- Toys, sports & leisure

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Flow Rate, 200 °C/5 kg	ASTM D 1238	g/10 min	15
Mechanical Properties			
Instrumented Dart Impact (total energy)	ASTM D 3763	in-lbs	5.3
Instrumented Dart Impact (Peak force)	ASTM D 3763	in-lbs	5.3
Tensile Stress at Yield, 23 °C	ASTM D 638	psi	4100
Tensile Modulus	ASTM D 638	psi x 10 ³	245
Elongation, Failure	ASTM D 638	%	40
Flexural Strength, 23 °C	ASTM D 790		4800
Flexural Modulus, 23 °C	ASTM D 790	psi x 10 ³	220
Hardness, Shore D	ASTM D 2240	-	72
Thermal Properties			
Vicat Softening Temperature, B/1 (120 °C/h, 10N)	ASTM D 1525	°F	194
DTUL @ 264 psi - Unannealed	ASTM D 648	°F	152
DTUL @ 66 psi - Unannealed	ASTM D 648	°F	177

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Property, Test Condition	Standard	Unit	Values
Coefficient of Linear Thermal Expansion	ASTM D 696	10 ⁻⁴ /°F	0.72
Electrical Properties			
Dielectric Constant at 106 CPS (1000000 Hz, 0,0394 in)	ASTM D 150	-	2.5
Volume Resistivity	ASTM D 257	-	>10 ¹³
Surface Resistivity	ASTM D 257	-	>10 ¹⁴
Optical Properties			
Refractive Index, Sodium D Line	ASTM D 542	-	1.579
Light Transmission at 550 nm	ASTM D 1003	%	90
Haze	ASTM D 1003	%	1.5
Other Properties			
Density (ASTM)	ASTM D 792	g/cm ³	1.02
Water Absorption, Saturated at 23 °C	ASTM D 570	%	0.07
Processing			
Linear Mold Shrinkage	ASTM D 955	in/in	0.0065

Typical values for uncolored products

Please note that all processing data stated are only indicative and may vary depending on the individual processing complexities.

Please consult our local sales or technical representatives for details.

SUPPLY FORM

Styrolux is supplied in pellet form and should be kept in its original containers in cool, dry place. Avoid direct exposure to sunlight. Styrolux® can be stored in silos at temperatures well below 45 °C.

PRODUCT SAFETY

During processing of Styrolux® small quantities of styrene monomer may be released into the atmosphere. At styrene vapor concentrations below 20 ppm no negative effects on health are expected. In our experience, the concentration of styrene does not exceed 1 ppm in well ventilated workplaces - that is where five to eight air changes per hour are made. For safety information please refer to our Material Safety Data Sheet for this product.

DISCLAIMER

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The above mentioned data are accurate to the best of our knowledge. They are based upon reputable labs and industry standard testing methods. These are only typical values and actual product specification may deviate at industrial range. Therefore, no data in this technical data sheet shall constitute a warranty or representation regarding product features, fitness of the product for a specific purpose or application or its processability. INEOS Styrolution disclaims all liability in connection therewith. The customer himself is required to verify whether or not the product is suitable for the further processing or application intended and whether or not the product complies with the relevant statutory requirements. Unless explicitly and individually otherwise agreed in writing, INEOS Styrolution's sole and exclusive liability with respect to its products is set forth in INEOS Styrolution's General Terms and Conditions for Sale.